COASTAL CONSERVANCY

Staff Recommendation January 18, 2018

CENTRAL-JEFFERSON HIGH GREEN ALLEY PROJECT

Project No. 17-012-01 Project Manager: Kara Kemmler

RECOMMENDED ACTION: Authorization to disburse up to \$1,180,000 to the Trust for Public Land for implementation of the Central-Jefferson High Green Alley Project in the City of Los Angeles.

LOCATION: Public alley right-of-ways in the South Los Angeles area in the City of Los Angeles, Los Angeles County

PROGRAM CATEGORY: Integrated Coastal and Marine Resource Protection

EXHIBITS

Exhibit 1: Project Location

Exhibit 2: Site Maps

Exhibit 3: Photos

Exhibit 4: Project Letters

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31220 of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes the disbursement of up to one million one hundred eighty thousand dollars (\$1,180,000) to the Trust for Public Land ("the grantee") for implementation of the Central-Jefferson High Green Alley Project in the City of Los Angeles, subject to the following conditions:

- 1. Prior to the disbursement of funds, the grantee shall submit for the review and written approval of the Conservancy's Executive Officer
 - a. a work program, including budget and schedule;
 - b. names and qualifications of any contractors to be retained for project work;
 - c. a signage plan for the project acknowledging Conservancy funding, and

- d. a written agreement between the Trust for Public Land and the landowner allowing the project to be implemented, maintained, and monitored, and protecting the public interest in the project.
- 2. Prior to commencement of construction, the grantee shall submit final construction plans and evidence that all necessary permits and approvals have been obtained."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

- 1. The proposed authorization is consistent with Chapter 5.5 regarding improving and protecting coastal and marine water quality and habitats (Section 31220).
- 2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
- 3. The Trust for Public Land is a nonprofit organization existing under section 501(c)(3) of the U.S. Internal Revenue Code, and whose purposes are consistent with Division 21 of the Public Resources Code"

PROJECT SUMMARY:

Staff recommends that the Conservancy authorize up to \$1,180,000 to the Trust for Public Land (TPL) for implementation of the Central-Jefferson High Green Alley Project in the City of Los Angeles.

The Central-Jefferson High Green Alley Network is a multiple-benefit urban greening effort that will transform currently blighted alleys in a dense, severely disadvantaged community challenged by park poverty, into a community asset that will yield environmental and public health benefits. These benefits include the capture and cleaning of polluted stormwater to recharge the underlying aquifer; the reduction of urban heat-island effect; the increase in safe walking and biking opportunities; the increase in outdoor play and recreation; and the creation of an edible landscape with the installation of drought-tolerant climbing vines and fruit trees.

The City of Los Angeles has over 900 linear miles of alleys and 300 miles of those alleys are in South Los Angeles, many of which, in their existing condition, attract trash and funnel polluted runoff from vehicles, streets, and parking lots directly into the storm drain system, the Los Angeles River and ultimately the ocean. As narrow corridors of impervious paving, alleys deliver this polluted stormwater at a high velocity and quantity into the storm drain system instead of restoring it to the local groundwater aquifer to meet the increasing need for Los Angeles to have local and sustainable water supplies.

The alleys of South Los Angeles are within communities that face many challenges: lack of access to open space and recreational opportunities (less than ½ an acre of open space for every 1,000 residents), insufficient and unsafe access for pedestrians and bicyclists, high levels of

crime, public health challenges and impaired air quality. These paved alleys are also heat islands that will become even hotter as temperatures are predicted to rise with climate change.

In 2015, The Trust for Public Land (TPL) released the South Los Angeles Green Alley Master Plan (AMP) to outline how the alleys in an 18 square-mile area of South Los Angeles could be redesigned to become a greener and safer community asset. The AMP sets out a vision and strategy for how green alley networks can, with the right redesign and green infrastructure, capture and filter stormwater, recharge groundwater, improve air quality, reduce the heat-island effect currently caused by the preponderance of paved surfaces, reduce greenhouse gas (GHG) emissions through increased vegetation and non-motorized travel, all while improving the quality of life for underserved communities by providing access to beautiful, useable spaces and safer routes for pedestrians and bicyclists.

The Central-Jefferson High Green Alley Network was identified by the AMP as one of five top priority Green Alley projects for South Los Angeles. The AMP particularly flagged the area's degenerated hydrologic function and impaired water quality as priority issues that could be addressed through the capture and treatment of stormwater runoff for an area that currently suffers from high impermeability, intense flooding and excessive pollutant levels.

The project will renovate 54,446 square-feet of public alley right-of-way. Project improvements will include the installation of high albedo pavement, traffic calming measures including crosswalk striping, lights and signage, permeable pavers, street plantings, infiltration trenches, a dry well system, and plantings of vines and trees.

Of the total alley right-of-way, 34,733 square feet will include stormwater BMPs capturing a total tributary area of approximately 7.31 acres, consisting of the subject alleys, portions of intersecting streets, private high-density residential property, and mixed commercial uses. This includes infiltration trenches that run down the center of six alleys as well as four dry wells, located near intersections with cross streets (Exhibit 2, SCC alley 1). The remaining 19,713 square feet of alley right-of-way (Exhibit 2, SCC alley 2) will only include vine and tree planting to capture and infiltrate stormwater.

The project will capture runoff from the intersecting streets with catch basin intercepts, replace asphalt with up to 4,400 square feet of permeable surfaces, percolate 1,850,000 gallons of stormwater per year, and provide at least 2,000 cubic feet of underground storage. The high percolation rates of the project soils will maximize groundwater recharge. The project area is located over the LA forebay, which is capable of storing and releasing large quantities of groundwater and allows percolation into deeper aquifers that replenish the groundwater basin.

TPL has developed expertise in green alley construction and renovation using the successes of Chicago's Green Alley Program as a source of inspiration. Beginning in 2012, TPL worked in partnership with the City of Los Angeles and USC's Center for Sustainable Cities to develop a green alley program for South Los Angeles. The project has gained support from the local community, city leaders, and local partners such as Jefferson High School, which has helped with community outreach. TPL implemented the first pilot project for this effort in 2015, which successfully transformed one of six alleys from what had been a polluted, unsafe, and

underutilized alley in a dense and severely economically disadvantaged neighborhood into a walkable, safe, green alley featuring innovative stormwater BMPs. This project follows on that effort to integrate green infrastructure to improve environmental and community health in dense urban neighborhoods.

The project is a partnership between TPL and the City of Los Angeles Bureau of Sanitation (BOS). TPL is a nonprofit public benefit corporation whose mission is to create parks and protect land for people, ensuring healthy, livable communities. The alleys where the project is located are city-owned right-of-ways and the improvements will be maintained by the BOS. TPL with assistance from the Council for Watershed Health will conduct pre- and post-implementation evaluation and monitoring to quantify green alley benefits including water quality and stormwater capture. TPL will also measure the project's additional environmental and social benefits, including increased pedestrian traffic and community engagement. These data will be used to record the multiple benefits of green alleys and build support for expanding the green alley network.

Site Description: The proposed project will improve three alley segments in a high-density, 100-acre neighborhood block in South Los Angeles. The project area parallels Central Avenue through the historic jazz district, and extends west and east to Thomas Jefferson High, Wadsworth Elementary, and Harmony Elementary. See Exhibit 2 maps.

Currently, the alleys are barren with no trees or other greening and are used as a dumping ground, leading to the accumulation of pollutants during dry months, including oil, heavy metals, nutrients, trash, sediment and bacteria. See Exhibit 3 photos of existing conditions. The project area's pervious surfacing and lack of vegetation prevent groundwater recharge, as stormwater is rapidly funneled into the storm drain system as polluted runoff into Reach 2 of the Los Angeles River, and ultimately to the Pacific Ocean.

According to the Department of Water Resources Disadvantaged Communities mapping tool, the neighborhood in which the project is located is a Severely Disadvantaged Community. The Central-Jefferson High Green Alley Network encompasses three census tracts, each exceeding the threshold for being considered severely disadvantaged with median household incomes ranging from \$26,193 to \$31,629 while the median household income for the City of Los Angeles is \$48,746. Further, two public schools are within network boundary (Wadsworth Elementary and Harmony Elementary), and over 85% of students are eligible for the Free or Reduced Meals Program. Residents of this area are disproportionately affected by poor air and water quality, and suffer from high rates of obesity, diabetes, and heart disease. The alley presents a major opportunity to transform blighted and polluted spaces into walkable, bikeable and playable green spaces, thus creating new active transit and recreational opportunities for residents.

Project History: In 2015, TPL, in partnership with the Los Angeles Bureau of Sanitation, broke ground on the first pilot project in South Los Angeles, the Avalon Green Alley Demonstration Project, funded in part by the Conservancy through the Climate Ready Program. See Exhibit 3 photos of Avalon Green Alley. The Avalon project transformed two alleys, and has since has been the subject of local, regional, and national interest, and heralded as a replicable model for

urban greening. Equally notable is the model for community building that was developed through this project. Urban greening is about creating sustainable communities and developing relationships with the communities around these projects is key to their success.

The initial challenge was eliciting consistent participation from residents otherwise disengaged from municipal decision-making processes. City of Los Angeles and TPL staff conducted doorto-door outreach to identify the neighborhood leaders, outreach materials were mailed to residents and flyers were posted throughout the neighborhood. Initial outreach efforts led to active engagement with a range of community members, including residents, local schools, and community-based groups, which then led to the formation of the Avalon Alley Green Team (Equipo Verde). Equipo Verde served as a partner in engaging and empowering the community. TPL continued to meet with residents each month for six years leading up to the project to update the residents on the status of the project, hold biannual alley clean-up events, and have yearly potluck parties to celebrate green alley development achievements and milestones. All meetings were conducted both in English and in Spanish. For many residents, the concept of transforming alleys into desirable public places with sustainable co-benefits was a new concept. Community members were given the opportunity to provide design input many times over the development process during events and activities. Coupling events and activities with gaining community input also helped to solve an overall negative perception of the alleys. Other formats included presenting options of green alley elements through conducting surveys, tabling, doorto-door engagement and interactive flip books. The result of this engagement was community input on mural designs, planting types and green alley features. Equipo Verde's efforts have included alley cleanups, tree planting, community art projects such as murals, and the formation of a neighborhood watch in coordination with the local police division. The community building around the project has created a sense of ownership and pride and the residents are expected to be long term stewards of the improved alleys.

Preliminary results show that the Avalon project is both effective and ready to be scaled up to address the social and environmental needs of other South Los Angeles neighborhoods. The proposed project builds on this earlier SCC investment by expanding what has been a successful and transformative initiative for the Avalon community into another South Los Angeles community.

PROJECT FINANCING

Coastal Conservancy	\$1,180,000
State Water Resources Control Board	\$2,400,000
City of Los Angeles, Council District 9	\$1,175,000
Project Total	\$4,755,000

The expected source of funding for this authorization is the fiscal year 2017/18 appropriation to the Conservancy from the "Water Quality, Supply, and Infrastructure Improvement Act of 2014" (Proposition 1, Division 26.7 of the Water Code, §§ 79700 *et seq.*). Funds appropriated to the Conservancy derive from Chapter 6 (commencing with Section 79730) and may be used "for multi-benefit water quality, water supply, and watershed protection and restoration projects for

the watersheds of the state" (§ 79731). Section 79732(a) identifies thirteen specific purposes of Chapter 6; the proposed project will help achieve three of the purposes:

- Implement watershed adaptation projects to reduce the impacts of climate change on California's communities and ecosystems (subsection (a)(2))
- Protect and restore urban watershed health to improve watershed storage capacity, forest health, protection of life and property, storm water resource management, and greenhouse gas reduction (subsection (a)(9))
- Reduce pollution or contamination of rivers and coastal waters, prevent and remediate contamination, and protect or restore natural system functions that contribute to water supply, water quality, or flood management (subsection (a)(11)).

The proposed project was selected through the fourth-round competitive grant process under the Conservancy's *Proposition 1 Grant Program Guidelines* adopted in June 2015 (see § 79706(a)). The proposed project meets each of the evaluation criteria in the Proposition 1 Guidelines as described in detail in this "section, the "Project Summary" section, above, and in the "Consistency with Conservancy's Project Selection Criteria & Guidelines" section below, of this staff recommendation.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project will be undertaken pursuant to Chapter 5.5 regarding improving and protecting coastal and marine water quality and habitats (Section 31220).

Section 31220(a) permits the Conservancy to provide grants for coastal watershed and coastal water quality, sediment management, and resources protection projects, if the projects meet one or more of the objectives detailed in Section 31220(b). Pursuant to Sections 31220(b)(1) and (7), the Conservancy is authorized to undertake a project or award a grant for a project that reduces contamination of waters within the coastal zone or marine waters and that reduces the impact of population and economic pressures on coastal and marine resources. The Central-Jefferson Green Alley Project will convert asphalt alleys to capture and infiltrate stormwater runoff, thereby enhancing water quality and reducing the volume of stormwater entering the Los Angeles River. As such, the proposed project will help improve water quality of coastal waters downstream, alleviate local flooding and increase stormwater infiltration reducing the impacts of dense population in the Los Angeles River Watershed.

As also required by Section 31220(a), Conservancy staff has consulted with the State Water Resources Control Board to ensure consistency with Chapter 3 (commencing with Section 30915) of Division 20.4 of the Public Resources Code. In addition, consistent with Section 31220(c) the proposed project will include a monitoring and evaluation component and is consistent with regional, local or State watershed management and water quality plans or programs, as described in the "Consistency with Local Watershed Management Plan/State Water Quality Control Plan" section, below.

CONSISTENCY WITH CONSERVANCY'S 2018-2022 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 6, Objective G**, the proposed project will improve water quality by improving the quality of urban stormwater runoff entering the LA River and thereby benefitting coastal and ocean resources downstream.

Consistent with **Goal 8, Objective C**, the proposed project will enhance the resiliency of coastal communities and ecosystems to the impacts of climate change by improving stormwater management through implementation of BMPs, increasing carbon sequestration and reducing urban heat island impacts through planting of trees and vines along alley borders as well as the use of light colored, permeable pavement.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on October 2, 2014, in the following respects:

Required Criteria

- 1. Promotion of the Conservancy's statutory programs and purposes: See the "Consistency with Conservancy's Enabling Legislation" section above.
- **2.** Consistency with purposes of the funding source: See the "Project Financing" section above and "Consistency with Local Watershed Management Plan", below.
- 3. Promotion and implementation of state plans and policies:
 - a) California Water Action Plan. The project helps meet the California Water Action Plan's objectives to create "more reliable water supplies" and "a more resilient, sustainably managed water resources system (water supply, water quality, flood protection and environment) that can better withstand inevitable and unforeseen pressures in the coming decades." It also advances two of the plan's priority actions, Action 6 Expand water storage capacity and improve groundwater management and Action 8 Increase flood protection.
 - b) The proposed project will implement the *California @ 50 Million: The Environmental Goals and Policy Report* (Governor's Office of Planning and Research, 2015) Goal 2, Action 5: Preserve and steward state lands and natural resources: build a strong, sustainable water system by capturing and storing water and banking more water in aquifers. Goal 3, Actions 1, 3: Build sustainable regions that support healthy and livable communities: provide safe and sustainable transportation options, clean air and water, open space, walkable communities and bicycling alternatives, and social relationships that are supportive and respectful, including options for civic engagement; cohesive neighborhoods; and communities free of crime and violence. Support and invest in active transportation projects, such as walking and biking infrastructure, including safe routes to schools.
 - c) CA Climate Adaptation Strategy: Safeguarding California. The proposed project is consistent with this 2014 plan because the proposed project will advance Strategy 4,

Action A: Practice and promote integrated flood management through flood management improvements.

- **4. Support of the public:** The proposed project enjoys broad and deeply invested community support from city leaders, public interest and community groups as well as involved neighborhoods, including Senator Holly Mitchell, Senator Ricardo Lara, Assemblymember Reginald Byron Jones-Sawyer, Los Angeles City Councilmember Price, Los Angeles City Bureau of Sanitation, TRUST South LA, and Council for Watershed Health.
- **5.** Location: The proposed project is located in the South Los Angeles area in the City of Los Angeles outside of the coastal zone. The site lies in the LA River Watershed and will have beneficial impacts to water quality in the coastal watershed system.
- 6. Need: Conservancy funding is needed to install the infrastructure needed to capture and clean stormwater and create a sustainable and much-needed water supply for Los Angeles. The outcome of seeking alternative funding sources would be uncertain and even if other funds were secured, it could lead to project delays, which would then delay the environmental and social benefits that are sorely needed for this water system and community.
- 7. Greater-than-local interest: The water quality and quantity benefits of the project will enhance the health and habitat values of the Los Angeles River Watershed, thereby benefiting special status and migratory species that depend on the river downstream of the project site. Further, the Los Angeles Central Basin is a high priority groundwater basin according to the California Statewide Groundwater Elevation Monitoring prioritization ranking. It has historically been over-drafted and challenged by impaired water quality. The project will both help recharge the Los Angeles Central Basin and improve the water quality by filtering stormwater before the water enters the aquifer. The sheer amount of water transported to LA from elsewhere in the state makes recharge of the local aquifer a benefit to the entire state of California.
- **8. Sea level rise vulnerability:** The proposed project area is not adjacent to the coast, nor is it vulnerable to sea level rise projected for 2050 or 2100.

Additional Criteria

- **10. Resolution of more than one issue:** The proposed project is a multi-benefit urban greening project that will address several issues associated with climate change including improving water quality and supply, attenuating urban heat island effects, and improving quality of life for communities in a disadvantaged area in Los Angeles.
- 11. Leverage: See the "Project Financing" section above.
- 13. Innovation: The latest GIS technology was used to analyze the potential stormwater capture for the Central-Jefferson High Green Alley network using the contributing areas and historical precipitation to generate both the estimated runoff volume and the estimated runoff volume that could be captured if the alley was redesigned. In addition, the project uses technologies and practices that are now being used in green infrastructure projects across the country but are new for South Los Angeles, including with light-colored, high albedo permeable pavers and concrete and stormwater management devices.

- **14. Readiness:** The grantee is engaged in final design and permitting, has a maintenance agreement in place with BOS, and will be ready to begin implementation of the project in 2018.
- **15. Realization of prior Conservancy goals:** See "Project History" section above.
- 17. Cooperation: The South Los Angeles Green Alley Master Plan was a collaboration among the City of LA BOS, Cal Poly Pomona Graduate Department of Landscape Architecture 606 Studio, Council for Watershed Health, and Jefferson High School's Green Design Academy. Project partnerships include Council District 9 Curren D. Price, Jr., the Mayor's Office of Community Beautification, and various nonprofit groups including, Los Angeles Conservation Corps, the Coalition for Responsible Community Development, Community Health Council/Coalition for an Active South Los Angeles, and TreePeople.
- 18. Vulnerability from climate change impacts other than sea level rise: Dense urban portions of LA are projected to experience a 4-4.5 °F temperature increase by 2040–2060.¹ This will directly subject urban residents to increased heat stress, which is exacerbated by the heat islands that are created with dark-colored, paved surfaces found on streets and alleys. Urban heat island effects are typically prevalent in densely developed neighborhoods with impervious pavement and little vegetation. The alleys in South Los Angeles provide an opportunity to mitigate urban heat island effects by installing high albedo surfaces and planting trees and other green cover.
- 19. Minimization of greenhouse gas emissions: The proposed project seeks to reduce transportation-related emissions by converting alleys into new non-motorized transportation corridors. Reducing GHG emissions through alley conversion is highly feasible: over 80 percent of non-work related trips in the City of LA are less than five miles in distance², which can be realistically covered by walking or biking. Green alleys create walk-bike corridors and provide safe connectivity between neighborhood amenities. Furthermore, as the green alley project is scaled up to include other South Los Angeles neighborhoods, it will decrease average vehicle miles traveled, as more people walk or bike on short trips through the network of alleys, rather than driving. The increase in tree canopy resulting from the project will also reduce GHGs directly through carbon sequestration. Although GHGs will be released during the construction phase of this project, the above noted GHG-reducing benefits will result in a net benefit in GHG reduction. Additionally, during construction TPL will work with the contractor to source as many products as possible locally (within 500 miles of the project site) and ensure waste from the construction site is recycled where possible and appropriate.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/ STATE WATER QUALITY CONTROL PLAN:

The Central-Jefferson High Green Alley Network will help implement the Upper Los Angeles River Watershed Management Group's Enhanced Watershed Management Program (EWMP)

¹ Mid-Century Warming in the Los Angeles Region. Part I of the "Climate Change in the Los Angeles Region" Project, available at http://people.atmos.ucla.edu/sun/doc/Sun 2012 LARC.pdf.

² Climate LA: Implementation Plan. http://environmentla.org/pdf/ClimateLA%20Program%20document%2012-08.pdf.

approved by the Los Angeles Regional Water Quality Control Board. The EWMP includes the Stormwater Capture Master Plan, a regional planning effort to identify opportunities to increase stormwater capture throughout the City. The State Water Resources Control Board (Water Board) has concluded that the EWMP meets the requirements of the *Storm Water Resource Plan Guidelines*, December 15, 2015, prepared by the Water Board pursuant to the Stormwater Resources Planning Act (Water Code §§ 10560 et seq.).

COMPLIANCE WITH CEQA:

The proposed project is categorically exempt from review under the California Environmental Quality Act (CEQA) pursuant to 14 California Code of Regulations Section 15301. Section 15301 exempts repair, maintenance and minor alteration of existing public structures, facilities and topographical features involving no expansion of use. This exemption applies because the project consists of repair, maintenance and minor alteration of public alleyways with no expansion of use.

Upon approval, staff will file a Notice of Exemption for this project.